

CLAIMS

What is claimed is:

1. A method of managing radio network access in an access terminal, the method comprising:
 - 5 establishing a connection with a first radio network;
 - suspending communication with said first radio network to communicate with a second radio network;
 - monitoring the time communication with said first radio network is suspended while communicating with said second radio network;
 - 10 resuming communication with said first radio network using said previously established connection with said first radio network if the duration of suspended communication does not exceed a maximum suspension time;
 - and
 - requesting a new connection with said first radio network if the duration of suspended communication exceeds said maximum suspension time.
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2. The method of claim 1 further comprising receiving said maximum suspension time from said first radio network;
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3. The method of claim 2 wherein the maximum suspension time is received by said access terminal during a connection establishment procedure.

4. The method of claim 3 wherein the maximum suspension time is received by said access terminal as part of a channel assignment message.

5. The method of claim 3 wherein the maximum suspension time is received by said access terminal in a broadcast control message.

6. The method of claim 1 wherein said access terminal requests a new connection with said first radio network by transmitting a connection request message to said first radio network.

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7. The method of claim 6 wherein said connection request message transmitted by said mobile terminal to said first radio network includes a dropped call indication to notify said first radio network that a previously established connection with said first radio network was terminated.

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8. The method of claim 1 wherein said first radio network comprises an IS-856 radio network.

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9. The method of claim 8 wherein said second radio network comprises an IS-2000 radio network.

10. The method of claim 1 further comprising storing a default maximum suspension time in said access terminal.

11. A method of managing radio network access in a radio network, said method comprising:

establishing a connection with an access terminal;

transmitting a maximum suspension time to said access terminal to indicate the
5 maximum allowed suspension time.

12. The method of claim 11 wherein said maximum suspension time is transmitted to said access terminal during a connection establishment procedure.

10 13. The method of claim 12 wherein said maximum suspension time is transmitted to said access terminal as part of a channel assignment message.

14. The method of claim 12 wherein said maximum suspension time is transmitted to said access terminal as part of a channel assignment message.

15 15. The method of claim 11 further comprising terminating said connection with said access terminal if communication with said access terminal ceases for a period that exceeds said maximum suspension time.

20 16. The method of claim 15 further comprising receiving a connection request from said access terminal to establish a new connection following termination of an earlier connection.

17. The method of claim 16 wherein said connection request received from said access terminal includes a dropped call indication notifying said radio network that said earlier connection with said access terminal was terminated.

5 18. The method of claim 17 further comprising giving said access terminal priority access to said first radio network if said connection request includes a dropped call indication.

10 19. The method of claim 11 wherein said radio network comprises an IS-856 radio network.

20. A method of managing radio network access in a radio network, the method comprising:
establishing a connection between an access terminal and a first radio network;
15 transmitting a maximum suspension time from said first radio network to said access terminal;
suspending communication with said first radio network by said access terminal
to communicate with a second radio network;
monitoring, at said access terminal, the time communication with said first radio
20 network is suspended while said access terminal is communicating with
said second radio network;
resuming communication by said access terminal with said first radio network
using said previously established connection with said first radio network

if the duration of suspended communication does not exceed said
maximum suspension time; and
requesting a new connection by said access terminal with said first radio network
if the duration of suspended communication exceeds said maximum
suspension time.

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21. The method of claim 20 wherein said maximum suspension time is transmitted by
said first radio network to said access terminal during a connection establishment
procedure.

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22. The method of claim 21 wherein said maximum suspension time is transmitted by
said first radio network to said access terminal as part of a channel assignment message.

23. The method of claim 21 wherein said maximum suspension time is transmitted by
15 said first radio network in a broadcast control message.

24. The method of claim 20 further comprising terminating said connection between
said first radio network and said access terminal if said mobile terminal ceases
communication with said first radio network for a period that exceeds said maximum
20 suspension time.

25. The method of claim 24 further comprising receiving a connection request at said first radio network from said access terminal to establish a new connection following termination of an earlier connection.

5 26. The method of claim 25 wherein said connection request transmitting by said access terminal to said first radio network includes a dropped call indication notifying said first radio network that said earlier connection with said access terminal was terminated.

10 27. The method of claim 26 further comprising giving said access terminal priority access to said first radio network if said connection request includes a dropped call indication.

15 28. The method of claim 20 wherein said first radio network comprises an IS-856 radio network.

20 29. The method of claim 28 wherein said second radio network comprises an IS-2000 radio network.

30. An access terminal comprising:
a dual mode transceiver for communicating with a first radio network in a first mode and a second radio network in a second mode;
a controller programmed to:

establish communication with said first radio network in said first mode;
suspend communication with said first radio network in said second mode;
maintain a timer in said second mode to monitor the time communication
with said first network is suspended;
5 resume communication with said first radio network using said previously
established connection with said first radio network if the duration
of suspended communication does not exceed a predetermined
maximum suspension time;
request a new connection with said first radio network if the duration of
10 suspended communication exceeds said maximum suspension
time.

31. The access terminal of claim 30 wherein said mobile terminal requests a new
connection with said first radio network by transmitting a connection request message to
15 said first radio network.

32. The access terminal of claim 31 wherein said connection request message
includes a dropped call indication to notify said first radio network that an earlier
connection with said first radio network was terminated.
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33. A radio network comprising:
a base transceiver station for communicating with an access terminal;
a base station controller programmed to:

establish a connection with said access terminal; and
transmit a maximum suspension time to said access terminal to indicate a
maximum allowed suspension time before communication with
said access terminal will be terminated.

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34. The radio network of claim 35 wherein said maximum allowed suspension time is
transmitted to said access terminal during a connection establishment procedure.

35. The radio network of claim 34 wherein the maximum allowed suspension time is

10 transmitted to said access terminal as part of a channel assignment message.

36. The radio network of claim 35 wherein said base station controller is further
programmed to terminate said connection with said access terminal if communication
with said access terminal ceases for a period that exceeds said maximum suspension time.

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37. The radio network of claim 36 wherein said base station controller is further
programmed to grant said access terminal priority access to said first radio network if an
earlier established connection was terminated by said base station controller.

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